

Jihoon Tack

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🎓 Google Scholar 🐙 GitHub 🔗 LinkedIn

CURRENT POSITION	Microsoft Research Senior Researcher (Reporting to: Jennifer Neville)	Nov. 2025 - Present Redmond, WA, US
EDUCATION	KAIST Ph.D. in Artificial Intelligence (Advisor: Jinwoo Shin)	Mar. 2019 - Aug. 2025 Daejeon, KR
	KAIST B.S. in Electrical Engineering and Mathematics (minor)	Mar. 2014 - Feb. 2019 Daejeon, KR
EMPLOYMENT AND ACADEMIC PLACEMENT	Meta FAIR Research Scientist Intern (Advisor: Xian Li)	Jun. 2024 - Mar. 2025 Menlo Park, CA, US
	University of Oxford Visiting Ph.D. Student (Advisor: Yee Whye Teh)	Jun. 2023 - May 2024 Oxford, UK
	Harvard University External Collaborator (Mentor: Jonathan Richard Schwarz)	Sep. 2023 - May 2024 Cambridge, MA, US (remote)
	Google DeepMind External Collaborator (Mentor: Jonathan Richard Schwarz)	Jun. 2022 - Aug. 2023 London, UK (remote)
	POSTECH External Collaborator (Mentor: Jaeho Lee)	Apr. 2022 - May 2023 Pohang, KR (remote)
RESEARCH INTERESTS	My current research focuses on scalable learning frameworks for human–AI interaction and collaboration, particularly in the context of large language models (LLMs). Prior to this, my work emphasized efficiency-oriented machine learning methods for addressing scalability challenges in large-scale models. Keywords: Efficient ML, Meta-Learning, LLM Agents/Reasoning, Multi-Turn RL	
PUBLICATIONS	* denotes equal contribution Preprints [P2] Scalable and Robust LLM Unlearning by Correcting Responses with Retrieved Exclusions Junbeom Kim, Kyuyoung Kim, Jihoon Tack , Dongha Lim, Jinwoo Shin [P1] ReGUIDE: Data Efficient GUI Grounding via Spatial Reasoning and Search Hyunseok Lee, Jeonghoon Kim, Beomjun Kim, Jihoon Tack , Cheonbok Park, Sookyo In, Chansong Jo, Jaehong Lee, Jinwoo Shin, Kang Min Yoo Conferences [C22] LLM Pretraining with Continuous Concepts Jihoon Tack , Jack Lanchantin, Jane Yu, Andrew Cohen, Ilia Kulikov, Janice Lan, Shibo Hao, Yuandong Tian, Jason Weston, Xian Li <u>ICLR 2026</u> [C21] Thinking Clearly: Enhancing Reasoning with Redundant Token Pruning Daewon Choi, Jimin Lee, Jihoon Tack , Woomin Song, Saket Dingliwal, Sai Muralidhar Jayanthi, Bhavana Ganesh, Jinwoo Shin, Aram Galstyan, Sravan Babu Bodapati <u>EMNLP 2025 (Findings)</u>	

- [C20] Mamba Drafters for Speculative Decoding
Daewon Choi, Seunghyuk Oh, Saket Dingliwal, **Jihoon Tack**, Kyuyoung Kim, Woomin Song, Seojin Kim, Insu Han, Jinwoo Shin, Aram Galstyan, Sravan Babu Bodapati
EMNLP 2025 (Findings)
- [C19] ReVISE: Learning to Refine at Test-Time via Intrinsic Self-Verification
Hyunseok Lee*, Seunghyuk Oh*, Jaehyung Kim, Jinwoo Shin, **Jihoon Tack**
ICML 2025
- [C18] Learning to Contextualize Web Pages for Enhanced Decision Making by LLM Agents
Dongjun Lee, Juyong Lee, Kyuyoung Kim, **Jihoon Tack**, Jinwoo Shin, Yee Whye Teh, Kimin Lee
ICLR 2025
- [C17] Online Adaptation of Language Models with a Memory of Amortized Contexts
Jihoon Tack, Jaehyung Kim, Eric Mitchell, Jinwoo Shin, Yee Whye Teh, Jonathan Richard Schwarz
NeurIPS 2024
- [C16] ReMoDetect: Reward Models Recognize Aligned LLM's Generations
Hyunseok Lee*, **Jihoon Tack***, Jinwoo Shin
NeurIPS 2024
Qualcomm Innovation Fellowship
- [C15] Optimized Feature Generation for Tabular Data via LLMs with Decision Tree Reasoning
Jaehyun Nam*, Kyuyoung Kim*, Seunghyuk Oh, **Jihoon Tack**, Jaehyung Kim, Jinwoo Shin
NeurIPS 2024
- [C14] Tabular Transfer Learning via Prompting LLMs
Jaehyun Nam, Woomin Song, Seong Hyeon Park, **Jihoon Tack**, Sukmin Yun, Jaehyung Kim, Kyu Hwan Oh, Jinwoo Shin
COLM 2024
- [C13] Unleashing the Power of Meta-tuning for Few-shot Generalization Through Sparse Interpolated Expert
Shengzhuang Chen, **Jihoon Tack**, Yunqao Yang, Yee Whye Teh, Jonathan Richard Schwarz, Ying Wei
ICML 2024
- [C12] Learning Large-scale Neural Fields via Context Pruned Meta-Learning
Jihoon Tack, Subin Kim, Sihyun Yu, Jaeho Lee, Jinwoo Shin, Jonathan Richard Schwarz
NeurIPS 2023
- [C11] Modality-Agnostic Self-Supervised Learning with Meta-Learned Masked Auto-Encoder
Huiwon Jang*, **Jihoon Tack***, Daewon Choi, Jongheon Jeong, Jinwoo Shin
NeurIPS 2023
- [C10] Modality-Agnostic Variational Compression of Implicit Neural Representations
Jihoon Tack*, Jonathan Richard Schwarz*, Yee Whye Teh, Jaeho Lee, Jinwoo Shin
ICML 2023
- [C9] STUNT: Few-shot Tabular Learning with Self-generated Tasks from Unlabeled Tables
Jaehyun Nam, **Jihoon Tack**, Kyungmin Lee, Hankook Lee, Jinwoo Shin
ICLR 2023 Spotlight
Samsung Research Paper Award, Bronze Prize
- [C8] Rethinking the Entropy of Instance in Adversarial Training
Minseon Kim, **Jihoon Tack**, Jinwoo Shin, Sung Ju Hwang
IEEE SaTML 2023
- [C7] Meta-Learning with Self-Improving Momentum Target
Jihoon Tack, Jongjin Park, Hankook Lee, Jaeho Lee, Jinwoo Shin
NeurIPS 2022

- [C6] *K*-centered Patch Sampling for Efficient Video Recognition
Seong Hyeon Park, **Jihoon Tack**, Byeongho Heo, Jung-Woo Ha, Jinwoo Shin
ECCV 2022
- [C5] Generating Videos with Dynamics-aware Implicit Generative Adversarial Networks
Sihyun Yu*, **Jihoon Tack***, Sangwoo Mo*, Hyunsu Kim, Junho Kim, Jung-Woo Ha, Jinwoo Shin
ICLR 2022
- [C4] Consistency Regularization for Adversarial Robustness
Jihoon Tack, Sihyun Yu, Jongheon Jeong, Minseon Kim, Sung Ju Hwang, Jinwoo Shin
AAAI 2022
Best Paper Award, Korean Artificial Intelligence Association
- [C3] Meta-Learning Sparse Implicit Neural Representations
Jihoon Tack*, Jaeho Lee*, Namhoon Lee, Jinwoo Shin
NeurIPS 2021
- [C2] CSI: Novelty Detection via Contrastive Learning on Distributionally Shifted Instances
Jihoon Tack*, Sangwoo Mo*, Jongheon Jeong, Jinwoo Shin
NeurIPS 2020
Qualcomm Innovation Fellowship
- [C1] Adversarial Self-Supervised Contrastive Learning
Minseon Kim, **Jihoon Tack**, Sung Ju Hwang
NeurIPS 2020

Journals

- [J1] Sparsified State-Space Models are Efficient Highway Networks
Woomin Song, **Jihoon Tack**, Sangwoo Mo, Seunghyuk Oh, Jinwoo Shin
TMLR 2025

HONORS

Qualcomm Innovation Fellowship Korea 2024
Google PhD Fellowship 2023, Research Area: Machine Learning
Samsung Humantech Paper Awards 2023, Bronze Prize
Best Paper Award, Korean Artificial Intelligence Association 2021
Qualcomm Innovation Fellowship Korea 2020
Conference Scholar Award: NeurIPS 2023
Reviewer Awards: NeurIPS 2020, CVPR 2021, NeurIPS 2022, ICLR 2025

INVITED TALKS

Scalable Adaptation and Control of LLMs with Amortization

- UNIST, Graduate School of Artificial Intelligence Sep. 2025
- POSTECH, Electrical Engineering Jul. 2025
- Microsoft Applied Research Talk Series Apr. 2025
- Microsoft Research, Montreal Jan. 2025
- Microsoft Research, AI Frontiers Dec. 2024

Learning Large-scale Neural Fields

- LG AI Research Apr. 2023

Consistency Regularization for Adversarial Robustness

- Korean Artificial Intelligence Association Nov. 2021
- ICML Workshop on Adversarial Machine Learning Jul. 2021

CSI: Novelty Detection via Contrastive Learning on Distributionally Shifted Instances

- Qualcomm AI Research Korea Feb. 2021
- NeurIPS Social: ML in Korea Dec. 2020
- Korea Software Congress Dec. 2020

ACADEMIC ACTIVITIES

Conference Reviewer: NeurIPS, ICML, ICLR, CVPR, ICCV, AAAI, ACL

Journal Reviewer: TMLR, IJCV, IEEE TPAMI, IEEE TNNLS, IEEE T-IFS, IEEE TIP

MENTORING

Hyunseok Lee, Ph.D. student at KAIST Feb. 2024 - Present

- Topic: LLM Safety/Reasoning/Agents
- Paper: NeurIPS'24 [C16], ICML'25 [C19], Preprint [P1]

Daewon Choi, Ph.D. student at KAIST

Oct. 2024 - May. 2025

- Topic: Efficient Decoding/Reasoning for LLMs
- Paper: EMNLP'25 Findings [C20,C21]

Seunghyuk Oh, M.S. student at KAIST

Feb. 2024 - Apr. 2025

- Topic: Efficient Decoding, LLM Reasoning
- Paper: ICML'25 [C19], EMNLP'25 Findings [C20]

Dongjun Lee, Ph.D. student at KAIST

Feb. 2024 - Nov. 2024

- Topic: LLM Agent
- Paper: ICLR'25 [C18]

Woomin Song, Ph.D. student at KAIST

Feb. 2024 - Nov. 2024

- Topic: Efficient LLM (State Space Model, Long Context LLM, RAG)
- Paper: TMLR [J1]

Huiwon Jang, M.S. student at KAIST

Feb. 2023 - Sep. 2023

- Topic: Meta-Learning, Self-Supervised Learning
- Paper: NeurIPS'23 [C11]

Jaehyun Nam, Ph.D. student at KAIST

Jun. 2022 - Sep. 2024

- Topic: Tabular Learning, Meta-Learning, Tabular LLM
- Paper: ICLR'23 [C9], COLM'24 [C14], NeurIPS'24 [C15]

last update: February 2026